



Application No. 10/081,087  
Reply to Office Action of February 25, 2004

**Amendments to and Listing of the Claims:**

Please cancel claim 5 and amend claims 1 and 8 so that the claims read as follows:

1. (currently amended) A positive electrode active material for an alkaline storage battery comprising: at least one selected from the group consisting of a nickel hydroxide powder and a nickel oxyhydroxide powder,

(1) said positive electrode active material having a mean particle circularity from not smaller than 0.95 to not larger than 1 and wherein the number of particles having a circularity of not larger than 0.85 accounts for not more than 5% of the number of total particles within said positive electrode active material,

(2) said positive electrode active material having a mean particle size from not smaller than 5  $\mu\text{m}$  to not larger than 20  $\mu\text{m}$  on a volume basis,

(3) said positive electrode active material having a specific surface area from not smaller than 5  $\text{m}^2/\text{g}$  to not larger than 20  $\text{m}^2/\text{g}$ , and

(4) at least said nickel hydroxide powder having an X-ray diffraction pattern where a full width at half maximum of a peak attributed to (101) face is from not less than 0.7 deg/2 $\theta$  to not more than 1.2 deg/2 $\theta$  and a ratio of a peak intensity of a peak attributed to (001) face to a peak intensity of a peak attributed to (101) face is not less than 1.1.

2. (original) The positive electrode active material for an alkaline storage battery in accordance with claim 1, wherein the whole or a portion of said positive electrode active material has a cobalt compound on a surface of said positive electrode active material.

3. (original) The positive electrode active material for an alkaline storage battery in accordance with claim 1, wherein said nickel hydroxide powder comprises a solid solution nickel hydroxide containing at least one selected from the group consisting of Co, Cd, Zn, Mg, Ca, Sr, Ba, Al and Mn.

4. (original) The positive electrode active material for an alkaline storage battery in accordance with claim 1, wherein said nickel oxyhydroxide powder comprises a solid solution nickel oxyhydroxide containing at least one selected from the group consisting of Co, Cd, Zn,

Mg, Ca, Sr, Ba, Al and Mn.

5. (canceled)

6. (previously presented) The positive electrode active material for an alkaline storage battery in accordance with claim 1, wherein, in a volume basis size distribution of the particles in said positive electrode active material, the particle size coordinate is not smaller than one-third of said mean particle size at a point where a cumulative volume accounts for 10% of a total volume of the particles.

7. (original) A positive electrode for an alkaline storage battery including the positive electrode active material in accordance with claim 1.

8. (currently amended) A method of producing a positive electrode for an alkaline storage battery comprising the steps of:

(a) preparing a paste containing a positive electrode active material; and (b) adding said paste to a metal substrate serving as a current collector and then rolling said substrate with said paste to form an electrode plate,

(1) said positive electrode active material comprising at least one selected from the group consisting of a nickel hydroxide powder and a nickel oxyhydroxide powder,

(2) said positive electrode active material having a mean particle circularity from not smaller than 0.95 to not larger than 1 and wherein the number of particles having a circularity of not larger than 0.85 accounts for not more than 5% of the number of total particles within said positive electrode active material,

(3) said positive electrode active material having a mean particle size from not smaller than 5  $\mu\text{m}$  to not larger than 20  $\mu\text{m}$  on a volume basis,

(4) said positive electrode active material having a specific surface area from not smaller than 5  $\text{m}^2/\text{g}$  to not larger than 20  $\text{m}^2/\text{g}$ , and

(5) at least said nickel hydroxide powder having an X-ray diffraction pattern where a full width at half maximum of a peak attributed to (101) face is from not less than 0.7 deg/2 $\theta$  to not more than 1.2 deg/θ and a ratio of a peak intensity of a peak attributed to (001) face to a peak

Application No. 10/081,087

Reply to Office Action of February 25, 2004

intensity of a peak attributed to (101) face is not less than 1.1.